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ABSTRACT

This project represents the first step toward the development and articulation of a broad theory of physical education under the aegis of the American Association for Health, Physical Education, and Recreation. It is an attempt to identify and describe a theoretical structure of physical education as an area of scholarly study and research. The publication, 'Tones of Theory' is directed toward members of the physical education profession and other concerned and interested individuals. The publication is an endeavor to articulate what physical education is, what it means, what it can become, how it can best be understood, and how it can best serve man's destiny. (Author/WS)

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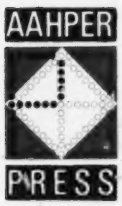
A THEORETICAL STRUCTURE FOR PHYSICAL EDUCATION—
A TENTATIVE PERSPECTIVE



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American Association for Health,
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A Project of the Physical Education Division

American Association for Health,
Physical Education, and Recreation

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INTRODUCTION "The Project"

by
Dr. Louis E. Alley, University of Iowa
and
President, American Association for Health, Physical Education, and Recreation

The sustained and interested concern of the American Association for Health, Physical Education, and Recreation in a national research project to identify and describe a theoretical structure of physical education as an area of scholarly study and research has been exemplified by several years of continuous activity by representatives of the Physical Education Division. They have been supported by enthusiastic policy and financial assistance from the Division Council and the Board of Directors of the AAHPER.

This publication is directed to members of the physical education profession, and other interested and concerned individuals. The first section, "The Genesis and History of the Project," describes the origins and subsequent series of activities which have transpired from the inception of this project to the development of the theoretical framework in its present form. The second section, "A Theoretical Structure for Physical Education—A Tentative Perspective," presents a conceptual framework for viewing, analyzing, and comprehending physical education in today's world, both as an area of scholarly study and research (an academic discipline) and as a professional field of teaching, learning, and evaluating the practical applications of physical education in daily life activities. Section Three, "What Does It Mean?" stresses the necessity for all concerned individuals to insure that theory development in physical education is constantly nourished and encouraged, and that the fundamental relationship between theory and practice is always viewed as an inviolate totality.

As president of the American Association for Health, Physical Education, and Recreation I am privileged to introduce this first formal publication to physical educators and others interested in the field. I urge you to study the report critically, and to submit your reactions and suggestions regarding the continuing and evolving development of this significant endeavor to articulate what physical education is, what it means, what it can be-

come, how it can best be understood, and how it can serve mankind's destiny.

The theoretical structure presented here is only the first tentative step in a project which will continu to be of central importance to the AAHPER in the years to come. Other individuals and groups have developed theoretical structures and frameworks from their perspectives, and similar work will continue on many fronts in the future. The structure described here attempts to present the conceptualizations which most accurately reflect the views of the contributors. It is highly tentative. It, too, will evolve and change over time, and will probably expand to include other structures from other perspectives.

This project represents the first small step toward the development and articulation of a broad theory of physical education under the aegis of the American Association for Health, Physical Education, and Recreation. We hope it will be a catalyst, not only for expanding the theoretical investigations sponsored by the Association, but also to challenge individuals and groups of physical educators holding different philosophical 'sets' to create new and improved theoretical propositions for describing, explaining, and predicting the nature of the realities of physical education as seen and understood from varying perspectives.

Section I The Genesis and History of the Project

Concerned physical educators have realized the need for this project for many years. With the launching of Sputnik in 1957, and the resulting concern and criticism from many sources about the quality of education being offered in our schools and colleges, and because of the greater insights and awareness of physical educators about the potential educational values inherent in this subject matter field, the need for a theoretical structure project became apparent.

Since 1961, professional organizations have established study committees, held conference meetings, and prepared programs on this subject. National leaders have recognized the need for a concerted cooperative effort by the various professional organizations which have a major interest in physical education.

Formally, the AAHPER Project had its genesis with the historic National Conference on the Interpretation of Physical Education held at Michigan State University, East Lansing, in December, 1961. This conference was financially sponsored by the Athletic Institute under the leadership of Colonel Theodore Bank, president of the Institute, and a well-known physical educator in his own right.

This pioneer undertaking was jointly sponsored by the American Association for Health, Physical Education, and Recreation; the National College Physical Education Association for Men; the National Association for Physical Education of College Women; the Society of State Directors of Health, Physical Education, and Recreation; and the Athletic Institute. The deliberations of this working conference clearly pinpointed the need for the project to develop a theoretical structure of physical education. The report[1] of this conference is one of the fundamental building blocks upon which subsequent progress has been based during the past 10 years.

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[1] *Report of the National Conference on Interpretation of Physical Education* (Chicago: The Athletic Institute, 1962).

The American Academy of Physical Education recognized that this project was of central importance to the profession, so it used this topic as its theme for its annual conferences in 1963, 1964, and 1965. The work of the Academy, along with contributions from many other individuals and organizations, made manifest the magnitude of the task that was unfolding and the necessity for a systematic national attack on the problem of obtaining required funds, and the time of a number of highly qualified members of the profession. This realization led to the proposal to hold a National Design Conference.

The 'Design' Conference was held in Chicago in October, 1965. It was sponsored jointly by AAHPER, the American Academy of Physical Education, and the Athletic Institute. The purposes of the conference were: (a) to examine the problems inherent in attempts to analyze the theoretical structure of any area of scholarly study and research, and (b) to devise a plan for conducting a systematic long-term and large-scale analysis of the operational structure of physical education.[2] The conferees recommended that the Physical Education Division of AAHPER assume primary responsibility for beginning the large-scale research project to identify and describe a theoretical structure of physical education. The AAHPER board of directors accepted this recommendation soon thereafter and assigned the direct operational responsibility for the project to the Physical Education Division Council.

Continuously since 1965, when the Council assumed formal responsibility for the project, a series of implementing steps and actions have occurred. The major events are summarized briefly.

In 1965, the Board of Directors of AAHPER authorized the development of a small grant proposal for submission to the United States Office of Education (USOE). The purpose of this grant was to prepare a large grant proposal which would fund a major, long-term research project to develop a tentative structure of physical education. After a series of committee meetings, AAHPER board discussions, and Division Council actions, the small grant request was prepared and submitted to USOE. Finally, after months of deliberation, revision, and informal negotiation, the USOE formally rejected the small grant proposal in April, 1969.

Yearly, since 1966, the board of directors of AAHPER has

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[2]Eleanor Metheny, "The 'Design' Conference," *Journal of Health, Physical Education, and Recreation* 37 (May 1966): p. 6.

continued to exhibit its commitment to the project, and has authorized Association funds to provide basic support for the continuation of the planning and further development of the project. Committee meetings, regional conferences, and one national conference have been funded by AAHPER periodically since 1966 to involve as many active contributors in the work of the project as is feasible. Several major steps in the evolution of the substantive content of the project have transpired in these intervening years. In October 1967, the primary co-investigators for this project were appointed by the Physical Education Division Council. They have held this appointment continuously since their original assignment.

The major highlight in the history of the project was the 1969 Conference of Twenty held in Zion, Illinois. The basic conceptual materials created at this conference became the focus for intensive critical review and analysis in three regional conferences held in March and April 1970. A list of 'Telling Questions' was the key product of the Zion Conference. Subsequently, a detailed synthesis and reformulation of these 'Telling Questions' were undertaken. This material was then evaluated and revised in the Regional Conferences.

In recent months the primary co-investigators have reviewed and synthesized all of the materials which have been accumulated during the life of this project.

Section two, "A Theoretical Structure for Physical Education—A Tentative Perspective," was approved by the board of directors of the AAHPER as the first public account of the project. It presents the substance and content, contributed by many persons to the project, as sifted, molded, and interpreted by the primary co-investigators. Although this publication has emanated from the work of all of the individuals involved in the meetings, conferences, and other endeavors closely allied to this project, the authors must be held accountable for the essence and basic rationale of the particular structure presented herein.

SECTION 2 A Theoretical Structure for Physical Education—A Tentative Perspective

A. INTRODUCTION

This section presents a tentative theoretical structure of physical education—a tentative perspective. It begins with a brief discussion of the nature of theory followed by a specific description of conceptual theory as it is related to physical education. Then follows a clarification of the relationship between physical education as a discipline and the body of knowledge of physical education. Next, the life-education relationship is described, followed by the process-media-result relationship. Then physical education knowledge, as a conceptual entity, is analyzed. Finally, the section concludes with a synthesis of these major aspects and suggestions of important implications for the future.

B. THE NATURE OF THEORY

Definitions. It is necessary to define the key terms *theory*, *facts*, *hypotheses*, and *laws* which constitute the foundational elements of this account of the AAHPER Project on the Theoretical Structure of Physical Education.

Theory. Theories are general assertions about various aspects or elements of the world. A theory is a conceptual structure based on a set of interrelated concepts which has for its purposes: (a) the tentative *description* of an event, object, or idea; (b) the tentative *description of relationship* between two or more variables (events, objects, ideas, or phenomena); (c) the tentative *explanation* of the cause and effect relationship between two or more variables (events, objects, ideas, or phenomena); and (d) the tentative *prediction* of the occurrence of an event or activity based upon the acquisition of warranted evidence.

A *theoretical structure* is a broadly conceived set of descriptive, explanatory, and predictive statements. The purpose of these statements is to explicate and clarify the *key organizing concepts*, basic beliefs, explicit and implicit assumptions, and the

specific theories, hypotheses, and facts which constitute the inventory of the symbolic expressions and records of the accumulated human experience concerning the phenomena under consideration.

Facts. Facts constitute the basic building blocks with which hypotheses, theories, and laws are constructed. A fact is a specific piece of information; it is the recognition and observation of a single event. Facts, as well as hypotheses, theories, and laws are intellectual constructions. Hypotheses and theories are abstracted from observable facts. Laws are deduced from hypotheses and theories and are verified by comparing their assertions with the world of observable facts.

Hypotheses. An hypothesis is more specific than a theory. It is not a broad proposition. It is a particular statement which can be used with theories and laws to provide an explanation of certain events. Hypotheses are constructed and confirmed by empirical (experiential) evidence. The 'truth' or acceptance of an hypothesis rests upon its ability to be confirmed through experience. Evidence used to test hypotheses can be in the form of either (1) statements based on natural law, or (2) sense-datum statements (facts).

Laws. On the other hand, laws are statements of confirmed invariant relationships in nature. Laws provide the most accurate method for explaining events and phenomena. Ultimate laws, those most rigorously validated, are explained by other laws and theories, and, often, these in turn are further explained by still other laws and theories.

Summary. Thus, *theories, facts, hypotheses,* and *laws* are inevitably intertwined and interdependent. Together they enable man to express conceptually his current understanding of occurrences and events. They are essential elements in man's scientific enterprise. Their major contribution is that of *explanation.*

Varieties of Theory. Gowin[3] indicates that there are five different meanings which commonly are accorded the term theory in various specialized segments of the academic world:

1. a set of spectacles (glasses) for viewing things—which suggests that theory is speculative;

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[3]D. B. Gowin, "A Trial Set of Distinctions and Definitions of Terms Used in Structure of Knowledge Analysis," mimeographed (Ithaca, N.Y.: Cornell University, May 28, 1969), 4 pp.

2. Scientific theory—a set of logically related verified hypotheses;

3. Philosophic theory—as a general assertion of value;

4. A set of prescriptions or rules to govern some activity (e.g. teaching);

5. A conceptual framework, a logically related set of ideas.

The person proposing a specific theory, or a broad theoretical structure, should state explicitly the definitional context he selects to use for his theory formulation. In developing a theoretical structure an essential early step is to arrive at a set of operational definitions about the phenomena which are deemed to constitute the central, significant concerns (foci) of the domain being studied.

APPROACHES TO THEORY DEVELOPMENT IN PHYSICAL EDUCATION

Fraleigh[4] identifies three different approaches to theory development as applied to physical education.

1. The application approach. Data and concepts from related fields of knowledge are selected and applied to the activities, operations, and practices of another field (e.g. physical education).

2. The implication approach. This approach is similar to the application approach but derives its elements mainly from philosophical study and inquiry. It involves the utilization of conceptual structure and content of philosophical systems (e.g. realism, idealism, pragmatism). Educational principles are deduced from these philosophical systems to form an educational philosophy. Likewise, principles are deduced as a basis for physical education theory. Physical education practices and decision making evolve from these principles.

3. The translation approach. This approach involves the acceptance of a given model as having the faculty to adapt, and to accept into it, some segment of physical education theory. The model, in turn, is expanded and modified by an inflow of content from specific types of investigation and analyses of human movement activities.

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[4]Warren P. Fraleigh, "A Prologue to the Study of Theory Building in Physical Education," mimeographed (San Jose, Calif.: San Jose State College, undated), 11 pp.

Concluding Statement. Theory may be concerned with any or all of the processes of description, interrelationship, and prediction about events, objects, ideas, and phenomena identified by the scholars and researchers in the area of study. From key theoretical assertions a more operational level of theorizing and hypothesis formulation may be constructed. The results provide guidance for the practical application of the main theory and its conceptual components, to the selection and employment of promising practices and effective decision making in realms of human activities (e.g. education, physical education).

Theory has one more major role. Not only is it based on the *known* (facts), on warranted concepts, and on logically consistent philosophical tenets, but it also proposes tentative projections into the unknown and the unexplored. Comprehensive theory assists us to realize that which we do not know, or what we know or believe only imperfectly. Thus, it points the way, and encourages further exploration, research, and rational thought on significant phenomena that, in turn, result in modification, revision, expansion, and clarification of the phenomena under scrutiny.

There is no one permanent theory. Theory is ever changeable as new data, enlarged and novel empirical evidence, rational thought, verified and rejected theories, intuitive leaps, and creative insights combine with philosophical viewpoints to spawn new and revised theories at all levels of conceptualization and articulation.

As new theories of physical education are generated and existing ones refined and modified, research specialists can more clearly identify significant phenomena to investigate. New evidence, in turn, will modify theories and result in warranted statements about regularities in man's scientific and philosophical thought systems which can attain the status of accepted generalizations or, ultimately, of laws.

Practitioners are guided by theories they hold either implicitly or explicitly as bases for decisions and judgments they make as they perform their assigned roles. In reality, teachers are *hypothesis makers*, because each plan they make, each action they take to effect desirable pupil behavior, is based on some understanding of what they, as teachers, believe and predict will happen to the pupil under planned conditions. Theory and practice are inseparable, for practice which is not based on theory is meaningless.

As theories of physical education are developed, clarified, tested, revised, and extended through this continuous process,

the understanding of the nature and purpose of this area of study will be enhanced for both researchers and practitioners. Their interpretation of the field to others will be clarified, and the quality of their professional decisions affecting people in varied environmental settings will be improved.

Therefore, theory is always tentative, fluid, and subject to evolution as new evidence becomes available. Ultimately, theory represents the most accurate and complete current record of man's understandings and comprehensions about himself, the world, and the universe in which he lives.

Hence, we have come full circle in this brief overview of what theory is and how it is generated and employed to serve man's philosophical, scientific, humanistic, and practical needs, drives, and interests. Theory is essential for man to learn, understand, and control (through prediction) his own destiny in the incessant, on-rushing, compelling human struggle for a life of purpose, fulfillment, and personal dignity.

C. CONCEPTUAL THEORY AND PHYSICAL EDUCATION

The words *concept* and *theory* have many connotations. For the purpose of clarification and parsimony, *concept* will be defined as *sensate information, comprehended and classified, but not necessarily analyzed. Theory* will be considered as a *systematic organization of concepts* into a logical scheme of relationships.

Hence, the *conceptual theory* of physical education is concerned with the interrelationship of all of the components which are generally considered as belonging to the body of knowledge of physical education. The conceptual theory of physical education deals with the relationships which characterize the field of study and its body of knowledge; the relationships of the school, college, and other institutional experience as contrasted with life experience; the process-media-result relationship, and the interaction of *how-to* and *what-for*.

In attempting to find rationale for its framework, physical education has sought to organize and utilize factual concepts such as *human movement phenomena, play, sports and games, recreation, human engineering, movement education, fitness, behavioral domains, holistic man,* and *education*. An attempt to sort out these concepts and their relationships may offer a tentative design which will facilitate understanding and provide a guide to needed research and improved educational practices. This structure represents the *translation approach* and, as such, is subject to the new facts and ever-changing laws and hypotheses.

D. DISCIPLINE-BODY OF KNOWLEDGE RELATIONSHIP

A discipline which could be titled *Human Movement Phenomena* is the broad category under which the body of knowledge labeled *physical education* can best be subsumed. Other bodies of knowledge, such as human engineering, physical therapy, recreation, educational-athletics, dance, physical medicine, professional athletics, and human ecology also are integral parts of the context of the disciplinary organization of the phenomena identified as *human movement*.

Each of these areas (and others which could be named) has an individual focus for its study of human movement, yet each is sensitive to the basic concerns of all. For example, *human engineering* looks at human movement in relationship to material products. Time-motion analysis, the adaptability of man to machines and machines to man, and the structuring of materials to accommodate man, are all concerns of human engineering. *Physical therapy* is based on the utilization of specific movement patterns to correct functional disabilities. *Recreation* is concerned with patterns of human movement as they relate to a leisure time sequence. Recreation utilizes movement patterns already acquired by the individual and seeks to find ways by which such patterns can enhance the individual's life style. Both *educational* and *professional athletics*, as specialized organizations of sport, relate human movement to game organization. Athletes and coaches are concerned with movement and its identification with the structure of the game. Important values may emerge from the game which are concomitant to the event itself. *Dance* relates movement to time and space in symbolic patterns of presentation. *Physical medicine* sees human movement as a therapeutic device to restore the individual to a healthful state. *Human ecology* seeks to use human movement in effecting a symbiotic relationship between the physical environment and homo sapiens, a relationship which will abet and augment the quality of life on this planet. Meanwhile, physical education focuses on the development of human movement through various pattern processes to help the individual identify his nature, his potential, and his limitations.

It is possible to depict the discipline-body of knowledge relationship in the following model:

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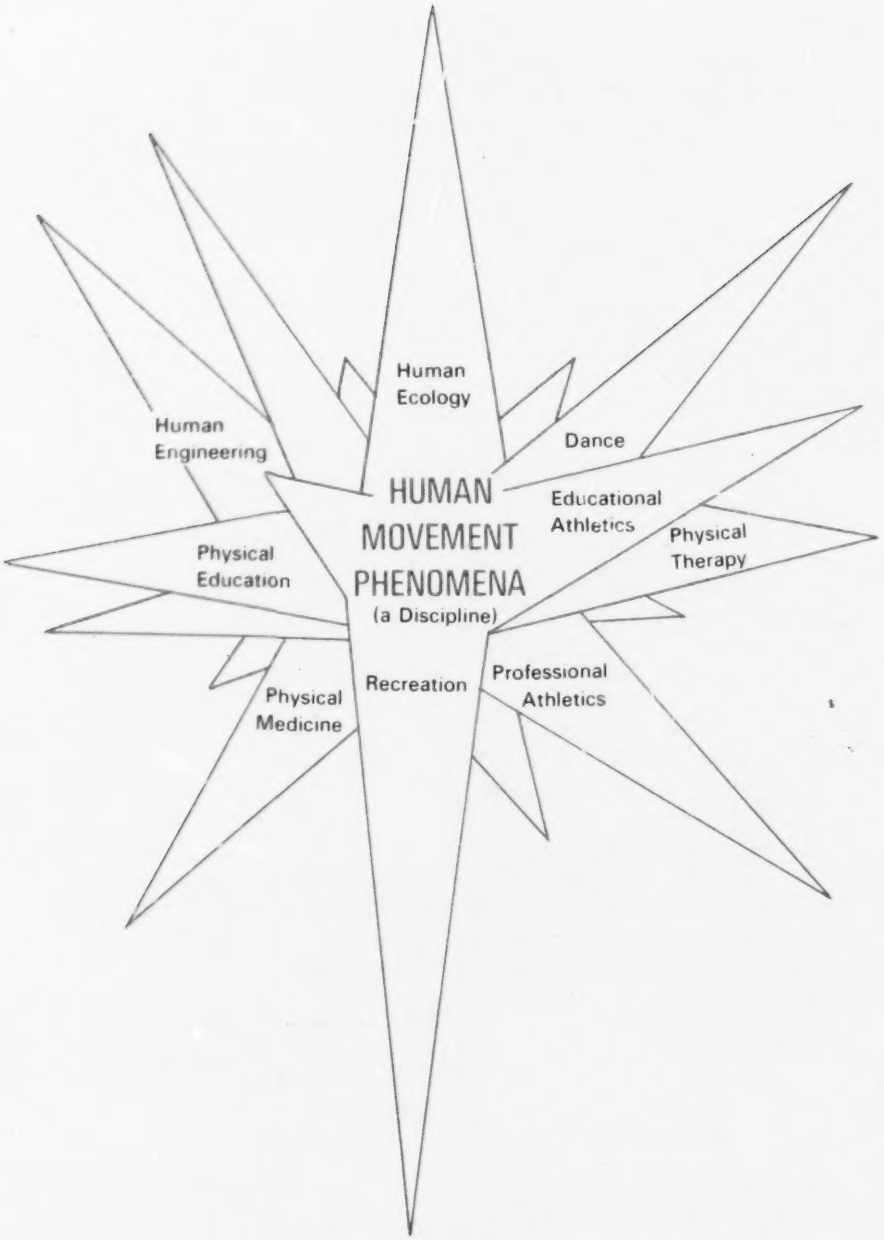

Human
Ecology
Human
Engineering
Dance
HUMAN
MOVEMENT
PHENOMENA
(a Discipline)
Educational
Athletics
Physical
Therapy
Physical
Education
Recreation
Professional
Athletics
Physical
Medicine

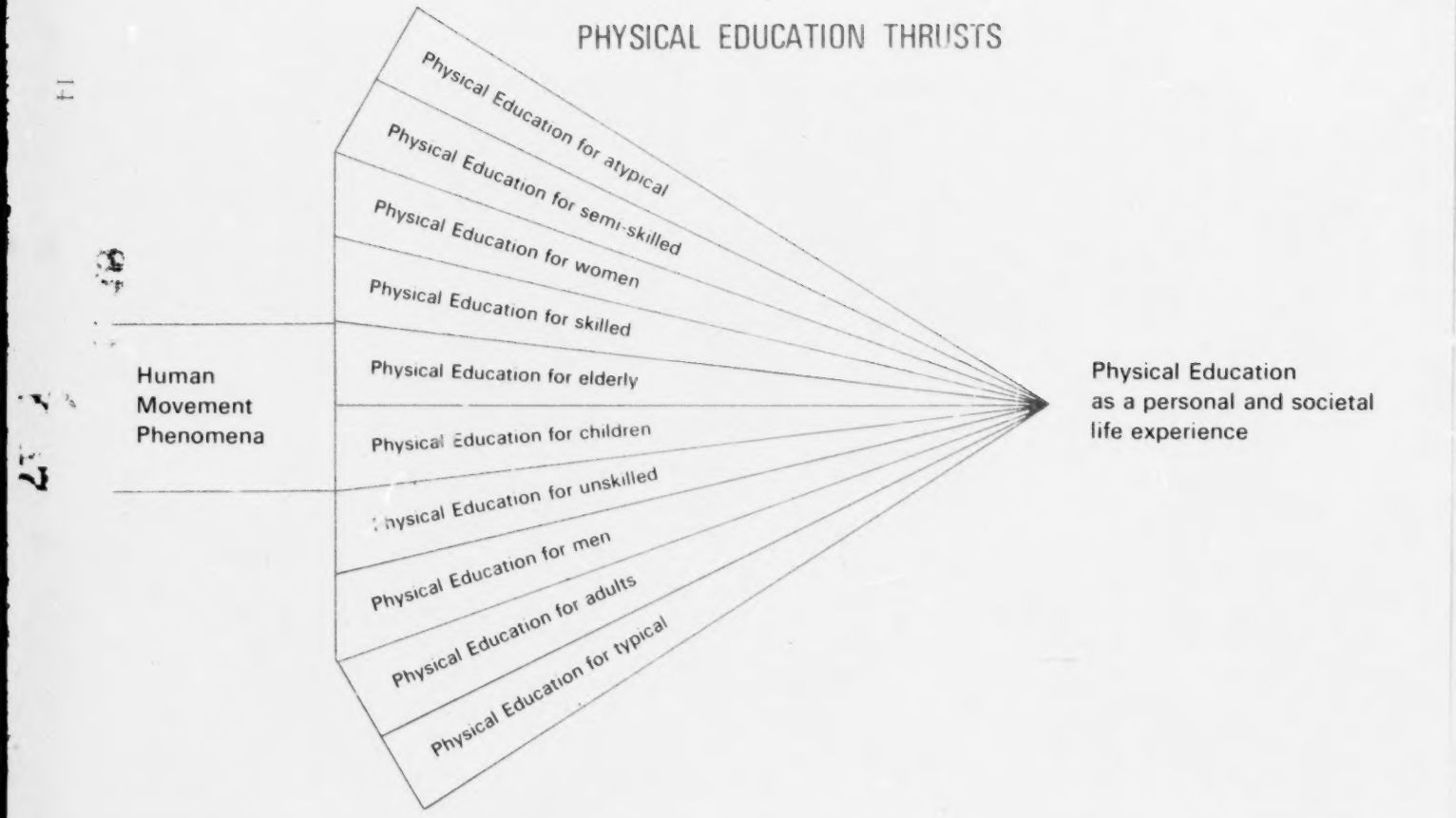
Physical education shares its concern about human movement with other areas. The specific concerns of these areas are not mutually exclusive, but have a meaningful relationship with each other. Athletics and recreation are both sensitive to physical education and physical education shares a portion of their special focus on sports and leisure. Physical medicine utilizes some of the techniques of movement which are also used by physical education. However, physical medicine and physical therapy are remedial and cater to the pathological, the prevention of the pathological, and the atypical rather than to the typical or normal individual. Human engineering and human ecology both are concerned with the harmony of man, movement, and material aspects of the physical environment; they share methods of effecting such harmony with athletics, recreation, and physical medicine, as well as with physical education.

The model of the star need not be interpreted as indicating that the discipline dealing with human movement phenomena has only nine points. Stars have many points in a three-dimensional model. There is the opportunity and flexibility in the discipline pertaining to human movement for multifaceted design.

E. LIFE-EDUCATION RELATIONSHIP

As one of the bodies of knowledge related to the human movement discipline, physical education has a commitment to influence the understandings, practices, and directions of that discipline. Traditionally, this responsibility has been accomplished through the social institution of the school, thus connecting physical education with the educational process. However, in a larger context, physical education has extended its concern with self-understanding to all people of all ages and dispositions, through many social institutions. Physical education tends to divide its concerns mainly in relation to process and product and then finds implications for these concerns in developmental and organizational syndromes (patterns, sets, forms, designs). Historically, such syndromes have related to age, sex, and aptitude classifications. Such stratification has limited the insights, although it has acutely sharpened some understandings within specific categories.

The life-educational relationship thrusts can be depicted in the following model:


PHYSICAL EDUCATION THRUSTS
Physical Education for atypical
Physical Education for semi-skilled
Physical Education for women
Physical Education for skilled
Physical Education for elderly
Physical Education for children
Physical Education for unskilled
Physical Education for men
Physical Education for adults
Physical Education for typical
Human
Movement
Phenomena
Physical Education
as a personal and societal
life experience

It is obvious from the above model that the usual way of looking at physical education can diminish the thrust of the arrowhead. If physical education, as a body of knowledge, relates only to young skilled males, or young unskilled females, or any combination of discrete wedges, a portion of the arrowhead is missing and the thrust of the physical education interpretation of human movement phenomena is lessened. Additional wedges could be added to the arrowhead to hone the point to a finer, more precise end. Wedges representing morphological characteristics, psychic readiness, and social aptitude are all potential additions. Other arrows of the human movement phenomenon exist for other bodies of knowledge, each capable of making an impact on the personal and societal life experience. The human movement phenomenon has a quiver of arrows.

F. PROCESS-MEDIA-RESULT RELATIONSHIP

If that part of the arrowhead which deals primarily with physical education in an educational milieu is extracted, it is possible to structure the process-media-result relationship. Such a relationship may have implications for the life-experience concerns of physical education, but the process-media-result pattern essentially is predicated upon the school experience.

The processes which are used by physical education in such a setting deal with types of movement. These, as described by Jewett [5,6] are:

Generic movement –	includes those processes which facilitate the development of effective and characteristic motor patterns; these may be regarded as movement fundamentals and are typically exploratory operations.
Ordinative movement –	includes those processes which organize, refine, and perform skillful movements; these may be regarded as specific patterned acquisitions and are perceptual-motor abilities with a view to solving particular movement tasks or requirements.
Inventive/ Creative movement –	includes those processes of inventing or creating skillful movements which serve the immediate and individual purposes of the learner; these

[5] Ann E. Jewett, "Implications for Curriculum Theory for Physical Education," *Academy Papers* 2 (1968): 10-18.

[6] _____, *Curriculum Handbook* (American Association for School Administrators) 1972.

movements may be regarded as styles and are directed toward discovery, integration, abstraction, idealization, emotional objectification, and composition.

These three types of movement are processed through the behavioral domains of the individual. Such processing often is structured in play-like situations. The domains of behavior are:

Cognitive domain – that aspect of behavior which deals with understandings, knowledges, and intellectual abstractions.

Affective domain – that aspect of behavior which deals with feelings, interests, attitudes, appreciations, sensations, and visceral involvement.

Motor domain – that aspect of behavior which deals with kinesthetic awareness, motoric abilities, and sensory-motor patterning.

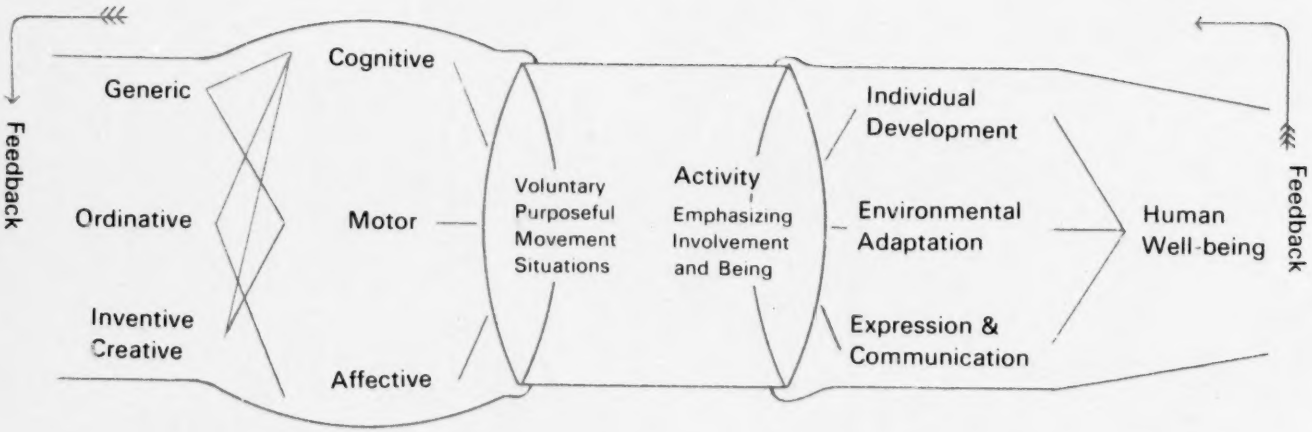
The means used in the processing deal with activity, which is carefully structured as to kind, and always conducted as to outcome. The media, or life-stuff, of physical education has a participation aura which demands active involvement and being, not just passive understanding and becoming.

The results of activity reside in its effect upon the desires, needs, and nature of the individual and his ability to recognize and accommodate his own actualization potential. The ultimate result could be described as total well-being in the most macrocosmic connotation of the concept and could be classified, as Jewett has done, through the "purpose-oriented concepts of movement." These are:

1. *Individual development through movement* (man as master of himself) – man develops through his movement.
2. *Environmental adaptation and control through movement* (man in space) – man adapts to his environment through movement; man controls or modifies his environment through movement.
3. *Expression and communication through movement* (man in a social world) – man expresses himself through movement; communication affects his movement.

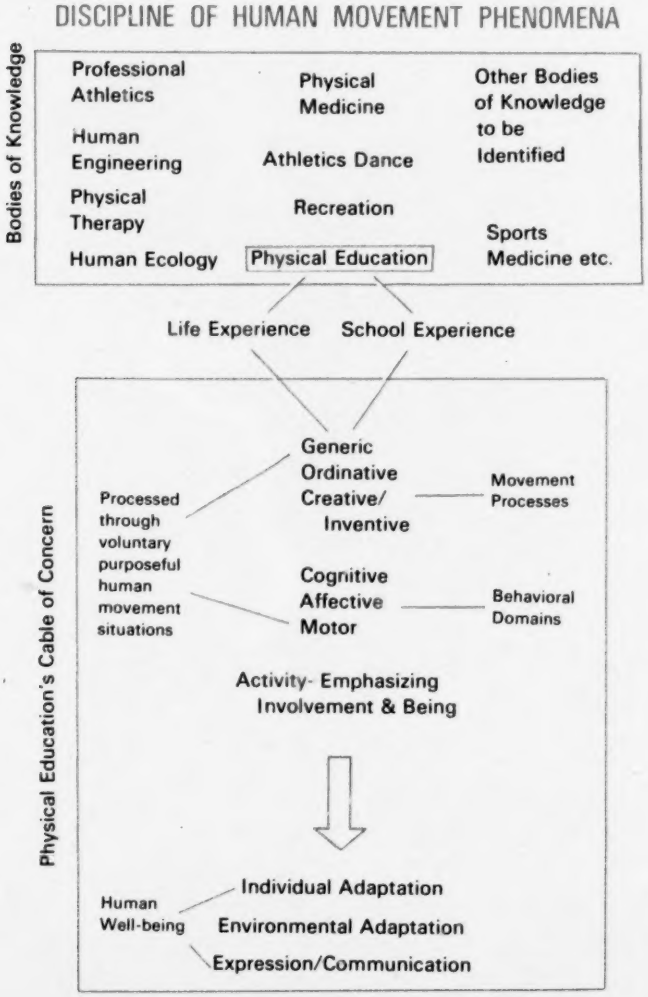
It might be possible to depict the relationship of process-media-result in the following model:

Physical Education's Cable of Concern



Process _____ Media _____ Result _____

The threads of process are funneled via voluntary, purposeful human movement situations which are synthesized for each individual through a conduit of activity which emphasizes involvement and being and results in purpose-oriented ends which meld into a composite of interwoven relays resulting in human well-being. Such a relationship among process-media-result clarifies the *how-to* and *what-for* interaction with regard to physical education.



The conceptual theory of physical education resides in its relationship to the discipline concerned with human movement phenomena; it finds its structure in both the total life experience and the school experience; its operational plan is structured in terms of movement processes, behavioral domains, activity, and the resultant recognition of the nature, needs, potentials, and limitations of the individual within his world.

G. PHYSICAL EDUCATION KNOWLEDGE

Conceptual theory provides the framework on, and within, which evolving knowledge can be structured. Knowledge, in this reference, is defined as general substantiated evidence used in analyzing and validating concepts. Thus, knowledge elucidates concepts even as concepts suggest a structure of knowledge. There is a cyclic relationship between conceptual theory and knowledge.

Physical educators identify their body of knowledge in reference to both the discipline of human movement and the conceptual theory of physical education. They are responsible for both broad understandings and specific factual evidence.

The knowledge implicit to the discipline of human movement is generalized knowledge which is shared by all of those areas which hold human movement within their purview. This knowledge is traditionally categorized according to content. As such, it may be located in many bodies of knowledge which are relevant to the discipline of human movement. However, the interaction of all knowledge pertaining to the human movement phenomena is the unique responsibility of the discipline of human movement. It alone is responsible for the structuring of disciplinary design, and it alone is held accountable for omissions, faulty logic, and flimsy patterns.

The disciplinary knowledge of human movement concerns itself with content areas, such as the following:

Biomechanics of movement

Human developmental patterns

Physiology of activity

Motor learning

Behavioral components of human movement

Meaning and significance of human movement

History of human movement meaning

Theories regarding the meaning of human movement

Social-cultural aspects of human movement

Symbols of human movement (art, sports, dance, aquatics, etc.)

The above content areas, structured upon factual evidence, filter through all bodies of knowledge which identify with the discipline of human movement. Thus, the human engineer, the doctor of physical medicine, the human ecologist, the coach, the recreator, the physical therapist, the dancer, the athletic director, and the physical educator should be sensitive to the generalized understandings afforded by study of the above content areas. Moreover, in an educational setting, such knowledge should be available to all students of human movement in order to enhance self-understanding and adaptation.

Physical education knowledge relating to the conceptual theory of physical education deals with both *process* and *product*. The student of physical education must understand how to process movement and how to utilize the product of movement. Hence, the *process, knowledge of physical education* (which is associated with specific sorts of activities), is found in the following content areas:

1. Acqusition of skill patterns through ordinative movement
2. Self-actualization through generic, ordinative, and creative movement
3. Creative patterns of activity emphasizing individual *style*
4. Conditioning and training regimens
5. Decision making and its movement patterns
6. Experience in behavioral situations which foster interaction, social stratification, social control, self-realization, motivational understandings, social processing, interpretations of ethics and morality, making value judgments
7. Behavioral opportunities for nonverbal communication
8. Utilization of cognitive learning commensurate with motoric development

These *process* knowledge areas have been historically labeled according to the activity sponsoring the process. Thus, labels of archery, bowling, tennis, football, field hockey, body mechanics, weight training, judo, basketball, and many others have

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contained the process knowledge of physical education. However, it should be noted that many times the process knowledge was incidental to the outcomes of activity, that is, process became a concomitant rather than a focus.

The *product* knowledge areas are clustered around the outcomes of activity. *Product knowledge in physical education* is concerned with:

1. Worthy use of leisure time
2. Ability to participate adequately in sports and games
3. Understanding of rules, strategies, and tactics
4. Organic integrity—usually called optimum physical fitness
5. Desirable behavioral attitudes
6. Emotional satisfaction gained through involvement
7. Maximum work results with minimum mechanical effort

It is to be noted that many of the *product* knowledges of physical education support a connotation of value. Thus, the products of activity have often been value loaded, tending to give physical education knowledge a moral flavor. Value knowledges are always subject to the fluctuation of cultural interpretation. Because of this, physical education knowledge (i.e. the subject matter of physical education) has been both in and out of favor with the times. It has been endorsed as a positive value and cursed as an unnecessary evil. Had the knowledge of physical education centered around process instead of product, such vacillation might not have occurred. It is still possible to remove the value from the product, if such a maneuver seems desirable.

All of the above knowledges are requisite to a clear understanding of physical education's relationship to the discipline of human movement. Understandings of the factual evidence support the conceptual theory of physical education, which, in turn, provides rationale for gaining additional knowledges and ascertaining new relationships.

In addition to human movement knowledge, and physical education process-product knowledge, there is *teaching-learning* knowledge. This knowledge is incidental to the consumer of physical education (the student) but absolutely essential to the purveyor of physical education (the teacher). Teaching-learning knowledge has certain generalized constructs found in nonspecific educational content. However, the teaching-learning knowledge of physical education is specific to that particular

body of knowledge. The area of physical education can support technical artisans (specialists who can *do* but do not understand *why*); however, the worth of physical education depends upon the teaching-learning knowledge of behavioral artists (teachers who can structure activity to enhance knowledge). The areas of content imperative to teaching-learning knowledge in physical education are found in:

1. Kinesiology
2. Philosophy of Physical Education
3. Teaching methodology for motor skill acquisition
4. Motor learning
5. Physical education curriculum construction
6. Evaluation in physical education
7. Administration of physical education
8. Adapted physical education
9. Practicum in teaching physical education

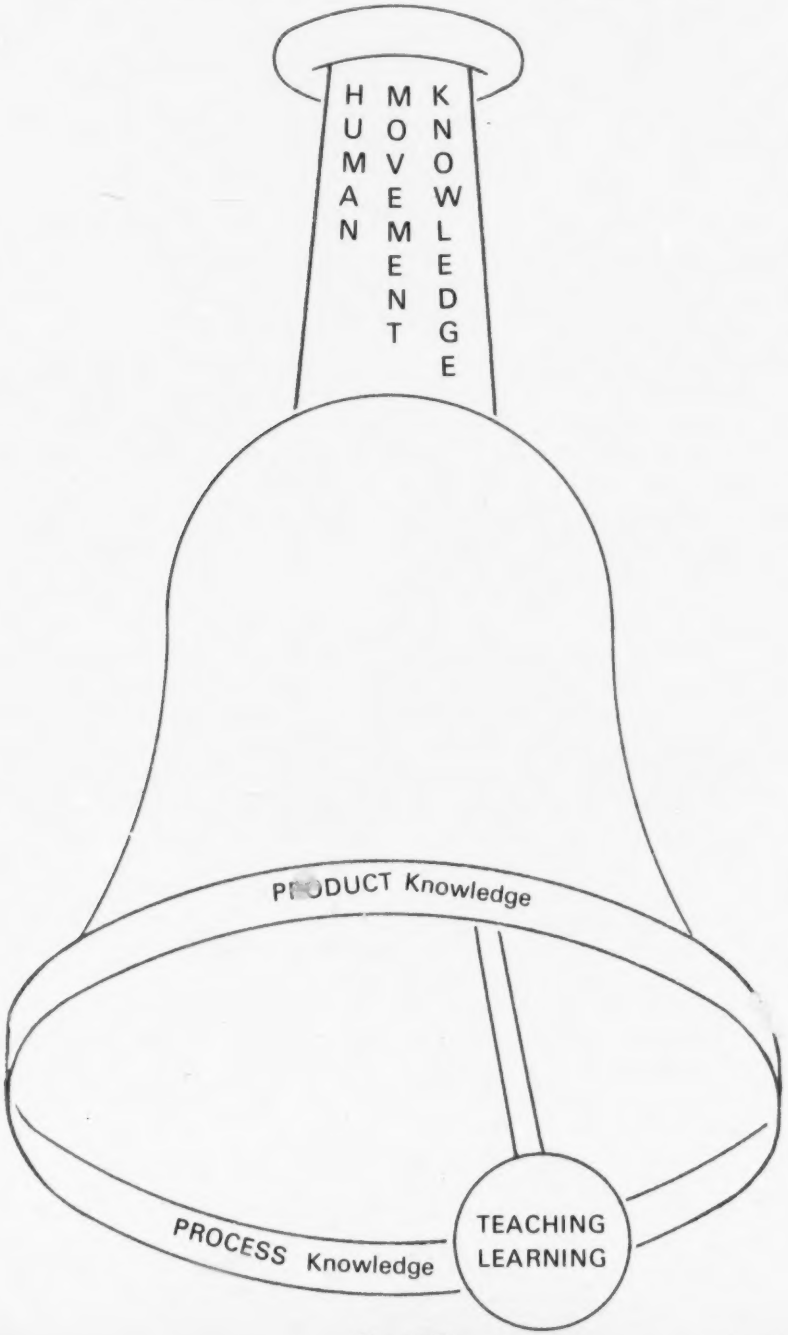
Such teaching-learning knowledge has direct reference to the conceptual theory of physical education. It provides the operational know-how, the "how-to" design.

It behooves physical educators to continually seek congruency between conceptual theory and knowledge. On such congruency rests the future of the body of understanding which is physical education. It is possible to depict the relationship of knowledges in the model on page 23.

In the bell of knowledge that is physical education, knowledge concerning human movement provides the handle for manipulation of the bell. The metal body of the bell has both an inside and outside aspect which accommodates the *process* and the *product* knowledges of physical education. The clapper, which is the *teaching-learning knowledge*, imparts action to experience and sets the tone as it hits specific areas of the bell's body. The interplay of each of the bell's segments provides intellectual integrity and assures that the bell's ring will herald a meaningful experience.

ERIC

PHYSICAL EDUCATION'S BELL OF KNOWLEDGE



SECTION 3 What Does It Mean?

A. THEORY AND PRACTICE

Theory suggests structure. Knowledge suggests understanding. Structure and understanding are interdependent. But what implications does this relationship have for the actual day-to-day operation of the physical education program in the typical educational setting?

Theory is devised by theoreticians, knowledge is exposed via research. The relationship of theory and knowledge must have some operational format. The interpreter of theory and knowledge therefore has some obligation to explain what it all means and how it can be utilized.

The conceptual theory of physical education should clarify for the practitioner the place of school-sponsored physical education. It should make clear the relationship of movement, fitness, play, discipline, body of knowledge, process, media, and result. It should provide an orderly scheme which can facilitate the "goodness of fit" of the varied components of physical education into a functional, viable, pattern of operation.

The relationship of the conceptual theory and knowledge defines the perimeters of physical education. It helps individuals make judgments regarding what physical education is. If the activity of surfing fits into the design, it might be considered as an addition to the program. If the activity of driving a car does not fit the structure, it is not to be considered as physical education. If the factual understandings concerning neurological integration fit the knowledge design, they should be included in the study of physical education; if the understandings of first aid for injury do not fit, they should be discarded as components of the physical education experience.

If the relationship of man's movement to agonistic behavior has a place in the matrix of physical education knowledge,

physical educators have an obligation to effect understanding of that idea. If the relationship of man's health to community health services does not fit the design, then that idea must be abandoned as a component of the physical education experience.

Thus, understanding theory and knowledge helps with decision making in regard to the curriculum and the knowledge thrusts of physical education. It allows for the elimination of ideas which may have the flavor of physcial education, but which cannot qualify for inclusion in the structure because they are not physical education.

The establishment of theory allows for, and encourages, the asking of additional questions, and thus insists that theory is mutable and not static. Theory and knowledge are sensitive to the times and must be reexamined continually to assure their vitality.

Undoubtedly there are other ways of structuring the body of knowledge of physical education. There is no "right" way. Just as the weaver can take the same threads and create a multitude of products, each different from the other in terms of color, design, texture, and function, so the physical educator can take his knowledges and concoct theory which is empathetic with specific points of view, and which is a reflection of the era, and a direction for posterity.

Theory becomes practice when some intelligent physical educator finds a way of checking practice in reference to theory and of effecting techniques to make real conceptual abstractions. The formulation of behavioral objectives for physical education makes practical the process-knowledge sponsored by physical education. The evaluation of organic integrity makes practical the assessment of the total fitness concern which is a part of the conceptual theory of physical education.

The tentative perspective for physical education conceptual theory argues for the disunion of athletics with physical education. It argues for affective and cognitive substance as well as activity patterns; it argues for holistic rather than atomistic commitments to the study of man; it argues for play with a purpose rather than having fun. The physical education knowledge and theory relationship argues against the inclusion of health, safety, recreation, and outdoor education in the physical education program. It argues against the dichotomizing of effort according to age, sex, educational level, or any other artificial set of descriptions which are not germane to the structure and function of the body of knowledge of physical education.

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Organized theory and knowledge insure that physical education knows itself. Both are liable to alteration; both need greater exposure; both seek mutable designs. The practitioner sees if theory works, and if knowledge has meaning. Upon the tenet of practicality rests the case for establishing the theoretical framework of physical education.

B. THE CHALLENGE

Theories are sensitive to the times. They do not accommodate absolute verities but rather propose relative constructs which hypothesize consta cy. This tentative perspective of theory offers hypotheses which should intrigue, tantalize, antagonize, placate, and motivate physical educators. It is a point of view, contributed to by many, interpreted by a few, and offered as a point of departure for the next step.

In the past, physical education's theoretical structure has been proclaimed by self-appointed, articulate, public, prophetic leaders. This 'first theory' is the composite search of a multitude of individuals whose main credential has been *concern*. Group endeavor does not enhance truth, but it does insist upon attention to different foci and thus assures generalizations which accommodate reality as well as desirability.

Theory must have practical applications. The finest test of theory is application. Physical educators must ascertain for themselves if this perspective is academic gobbledy-gook, or if it is the basic "stuff" for understanding and for decision making.

Physical education is only as meaningful as its practices. As those practices are related to a pattern, it is possible to foster synthesis, even as analysis is encouraged. As the structure of theory continues to be concocted, the fragmentation of effort which has so long plagued practitioners may abate. Clarity as to purpose and practice may emerge.

It is tempting to wish for absolute theory on which practice might be based from this time forward, but such stability would herald the demise of physical education. The uncertainty, the frustration, the agony of not knowing the totality makes for incentive, effervescence, and the challenge.

Today's tentative perspective should be the cutting edge of current practice. Tomorrow's theoretical model will be based on an expanding set of axioms which will hone the rim of the future. Continual attention to establishing constructs and designing theory is imperative. The challenge of theory insists upon professional integrity, acute involvement, and continuing attention.

Appendix

Committee of Three Conference to Formulate a Research Grant Proposal

Stanford University; Stanford, California, October 10-13, 1966

John Nixon Howard Slusher Celeste Ulrich

Conferees Attending the 'Design' Conference on Physical Education as an Area of Scholarly Study and Research

Chicago, Illinois, October 13-16, 1965

Ruth Abernathy	Anna Espenschade	Ben Massey	Lawrence Rarick
Theodore P. Bank	Marvin Eyler	Eleanor Metheny	Celeste Ulrich
Marion Broer	Leona Holbrook	John Nixon	Deobold Van Dalen
Arthur Daniels	Laura Huelster	Carl Nordly	Earle Zeigler

Conferees Attending the Conference on the Physical Education Theoretical Structure Project

Zion, Illinois June 3-6, 1969

Ruth Abernathy	John Cooper	Laura Huelster	Ben Miller
Louis Alley	Marvin Eyler	Ann Jewett	John Nixon
Camille Brown	Warren Fraleigh	Perry Johnson	Howard Slusher
Harrison Clarke	D. Bob Gowin	King McCristal	Celeste Ulrich
Marguerite Clifton	(Consultant)	Ross Merrick	Deobold Van Dalen

Conferees Attending the Eastern Regional Conference on the Physical Education Theoretical Structure Project

College Park, Maryland March 20, 21, 1970

Jan Broekhoff	Marvin Eyler	Seymour Kleinman	Lee Vander Velden
Curtis Coutts	Joan Hult	John Loy	

Conferees Attending the Central Regional Conference on the Physical Education Theoretical Structure Project

Toledo, Ohio, March 13, 14, 1970

David Clarke	Dale Hanson	Ben Massey	Wayne Van Huss
John Drowatzky	Perry Johnson	Wynn Updyke	Harriet Williams

Conferees Attending the Western Regional Conference on the Physical Education Theoretical Structure Project

Los Angeles, California, March 21, 22, 1970

Camille Brown	Jeanne Grenzeback*	Peggy Iden	Barbara Swarkes
Warren Fraleigh	Patricia Griffin	Eleanor Metheny	

*Dr. Grenzeback analyzed and synthesized the 'Telling Questions' as one of the bases for the deliberations of the Regional Conferences